Attorney Docket No. 740250-821 Application Serial No. 09/666,481

AMENDMENT TO THE CLAIMS:

Please amend the claims as follows.

- 1.-27. (Canceled)
- 28. (Previously Presented) A method of producing 2-alkyl-4-isothiazoline-3-one represented by the general formula (III),

wherein the compound represented by formula (II),

is reacted with chlorine as a chlorinating agent in dichloromethane as a solvent, in which hydrogen chloride is insoluble or exhibits low solubility, at a temperature of 39-41°C, according the reaction formula represented by:

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wherein R in the compounds of formulae (II) and (III) represents a C1 to C8 alkyl group or aralkyl group, and

wherein the amount of a 5-chloro-2-alkyl-4-isothiazoline-3-one contained in the 2-alkyl-4-isothiazoline-3-one produced is less than 0.1%.

- 29. (Currently Amended) The method of producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, wherein the R represents a methyl group.
- 30. (Currently Amended) The method of producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, wherein the R represents a normal octyl group.
- 31. (Currently Amended) The method of producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 28, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula (III) III with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.
- 32. (Currently Amended) The method of producing a 2-alkyl-4-isothazoline-3-one as defined in Claim 29, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula (II) II with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.
 - 33. (Currently Amended) The method of producing a 2-alkyl-4-isothazoline-

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3-one as defined in Claim 30, further comprising the steps of filtrating a hydrochloride salt of the compound of formula (III) obtained from the reaction of the compound of formula (III) H with chlorine, and washing the hydrochloride salt with a solvent which is inert to the hydrochloride salt and in which the hydrochloride salt exhibits low solubility.

34. - 39. (Canceled)